

CLAIMS

1. Assembly of bellows part and co-acting part, comprising a bellows part with a flexible wall of a predetermined shape and thickness which co-operates with the co-acting part, which comprises a stiff outer wall 5 along which the flexible wall is movable.

2. Assembly as claimed in claim 1, wherein the co-acting part is a part against which unrolling takes place (unrolling part) and wherein the stiff outer wall has a predetermined diameter variation and/or the flexible wall 10 has a predetermined thickness variation so as to cause a desired development of force.

3. Assembly as claimed in claim 1 or 2, wherein the flexible wall is partially turned back and wherein a turned-back edge is arranged on an outer end thereof for 15 the purpose of absorbing a pressure force.

4. Assembly as claimed in claim 2 or 3, wherein the development of force is constant, increasing, decreasing or a combination thereof.

5. Assembly as claimed in claim 2, 3 or 4, wherein the 20 development of force comprises one or more peaks.

6. Assembly as claimed in any of the claims 1-5, wherein an outer end of the co-acting part is conical.

7. Assembly as claimed in any of the claims 1-6, wherein the outer wall of the unrolling part comprises a 25 thickened portion for the purpose of causing a peak in the development of force.

8. Assembly as claimed in any of the claims 1-7, wherein the outer wall of the unrolling part comprises a bend.

30 9. Assembly as claimed in claims 1-8, wherein the outer wall of the unrolling part comprises a part of

concave cross-section for the purpose of causing an increasing spring force.

10. Assembly as claimed in any of the claims 1-9, wherein the outer end of the unrolling part comprises a part of convex cross-section for the purpose of causing a decreasing spring force.

11. Assembly as claimed in any of the claims 1-10, wherein the thickness variation of the flexible wall of the bellows at least partially determines the development of force.

12. Assembly as claimed in any of the foregoing claims, wherein the bellows is of a thermoplastic polymer or an elastomer.

13. Assembly as claimed in any of the foregoing claims, wherein the flexible wall of the bellows is substantially cylindrical.

14. Assembly as claimed in any of the foregoing claims, wherein the wall of the bellows is of substantially convex cross-section.

20 15. Assembly as claimed in any of the foregoing claims, wherein the bellows comprises an integrated pressure valve and/or an integrated suction valve.

16. Assembly as claimed in claim 15, wherein the suction valve comprises a number of, for instance three, 25 legs which are connected to the flexible wall.

17. Assembly as claimed in claim 16, wherein the legs are Z-shaped in top view for an improved spring action.

18. Assembly as claimed in claims 15-17, wherein the suction valve comprises a guide protrusion for guiding the 30 suction valve.

19. Assembly as claimed in claims 15-18, wherein the pressure valve is a cylindrical flexible wall.

20. Pump comprising an assembly as claimed in any of the claims 1-19.

21. Pump as claimed in claim 20, comprising a pistol mechanism in which the assembly is incorporated.

5 22. Method for using an assembly as claimed in any of the claims 1-19 and/or a pump as claimed in claims 20-21.